

**April 20, 2005**

**To: Oregon State Board of Agriculture**

**From: Inland Rogue Local Advisory Committee**

**Re: Biennial Review of the Area Plan and Rules**

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## **I. Purpose**

The Inland Rogue Local Advisory Committee (LAC) is submitting this report to the Board of Agriculture to summarize implementation of the Inland Rogue Agricultural Water Quality Management Area Plan and Rules (Area Plan and Rules), as provided for in Oregon Administrative Rule (OAR) 603-090-0020 (4).

## **II. Introduction**

Senate Bill 1010 authorizes the Oregon Department of Agriculture (ODA) to develop and implement an Area Plan and Rules wherever such a Plan is required by state or federal law.

The Inland Rogue Agricultural Water Quality Management Area (Management Area) consists of non-Federal and non-Tribal Trust lands in the Inland Rogue drainage. The area described as the "Inland Rogue" is essentially bounded by the Josephine and Jackson County boundaries. These two counties have a drainage area of over 4,400 square miles. The Rogue River watershed encompasses a total of 5,156 square miles. It is a major river in southwest Oregon.

An Area Plan and Rules were developed for the Inland Rogue Agricultural Water Quality Management Area because Total Maximum Daily Loads (TMDLs) were being developed by the Department of Environmental Quality (DEQ) for temperature and bacteria. Agriculture is required to provide reasonable assurance that it will meet its load allocations for listed parameters. Additionally, stream segments were also listed on DEQ's 2002 303(d) list of water quality limited waterbodies for sediment, dissolved oxygen, pH, and algae. Coho salmon are listed as an "Endangered Species" in southern Oregon and northern California in what is known as the Oregon and Pacific Coast Evolutionarily Significant Units by the National Oceanic and Atmospheric Administration - Fisheries Service.

In early 2001 the LAC, working with ODA and the Jackson Soil and Water Conservation District (SWCD) completed the Area Plan and Rules. The Area Rules were adopted in June 2001 under the guidance of Tim Stevenson, ODA Water Quality Planner. ODA then worked with the Jackson SWCD, the Natural Resources Conservation Service (NRCS), OSU Cooperative Extension, private landowners, and other partners to implement the Area Plan and Rules.

### **III. Background**

When developing the Inland Rogue Area Plan and Rules, the LAC identified several objectives that, if achieved, would significantly improve water quality in the Management Area. The LAC then developed rules that had to be met on all agricultural and rural lands. Each rule was intended to prevent pollution as close to the source as possible, and to meet agriculture's expected load allocations in the TMDL.

#### **The mission statement for the Inland Rogue Area Plan adopted by the LAC is:**

To describe reasonable methods and practices all people engaged in agricultural activities may use to maintain and improve water quality while preserving and enhancing economic viability in the Rogue Basin.

The objective of the Inland Rogue Area Plan is to attain water quality standards that serve the beneficial uses designated for the Rogue Basin. They are listed alphabetically.

- Aesthetic quality
- Anadromous fisheries passage, rearing, and spawning
- Cold water resident aquatic life
- Commercial navigation and transportation
- Contact recreation, fishing, and boating
- Drinking water, both public and private
- Irrigation
- Livestock watering
- Threatened and endangered species
- Wildlife and hunting

The committee's plan is intended to:

- Be based on scientifically defensible data.
- Protect water quality in agricultural settings.
- Protect the economic viability of the agriculture industry in the Rogue Basin.
- Help set priorities so that resources are distributed where they will be of the most benefit to help the industry meet its long-term water quality objectives.
- Address each subbasin as a unique entity.
- Develop desirable agricultural condition requirements that are not prescriptive and provide for a wide variety of agricultural practices to alleviate potential problems.
- Develop condition descriptions that allow for the unique character of specific sites.

#### **Summary of the 2001 Inland Rogue Area Plan**

The LAC developed a series of pollution control and prevention guidelines specifically for the Inland Rogue. This section was developed around the water quality standards listed in the Inland Rogue which

are directly affected by agricultural activity; sedimentation, nutrients, bacteria, and temperature. For each of these parameters, the committee identified:

- Information about the parameter to provide basic understanding of the reason for concern.
- A statement identifying the unacceptable condition that will be reflected in the Oregon Department of Agriculture Administrative Rules.
- Steps that will be taken by the Oregon Department of Agriculture when investigating a complaint.
- Examples of situations that could lead to an unacceptable condition. These examples are provided to alert landowners and managers to potential problems, rather than to prescribe particular treatments.

Also, a list of educational and project oriented objectives were identified.

### **Summary of Inland Rogue Local Management Agency Activities**

Jackson SWCD is the Local Management Agency (LMA) for both the Bear Creek and the Inland Rogue Plans. Illinois Valley and Josephine SWCDs are also within the Area Plan boundaries.

Since Area Plan and Rules adoption, Jackson SWCD directors and employees have worked closely with ODA, NRCS, and OSU Extension to hire competent technicians, coordinators, monitoring services, and workshop presenters, as well as initiate mass media campaigns. In the first biennium, Jackson SWCD hired someone who was primarily an outreach and education coordinator. The accomplishments reflect that role.

#### **Jackson SWCD LMA Activity Summary 2001-2003**

<b>Activity</b>	<b>Number</b>	<b>Number Participants</b>
Workshops Presented	11	246
Meetings Held	51	217
Meetings Attended	122	1,826
Tours Conducted	6	76
Displays Prepared & Staffed	6	312
Demonstrations Given	3	412
Grant Preparation Assistance Given	10	50

#### **Illinois Valley SWCD SB1010 Activity Summary 2001-2003**

<b>Activity</b>	<b>Number</b>
Watershed Friendly Steward Awards	6
Conservation/Resource Management System Plans	35
Acres Planned	620

## Alternatives to Push-up Dams Planned and/or Installed

- McIntosh Pump Station - design completed, about to begin construction
- Crutchfield Pump station - almost completed
- Sommers Pump station - almost completed
- Lewis Ditch - pipeline, structure removal
- Moser Ditch - pipeline, structure removal
- Holland Ditch - design in process
- Elliott Ditch - design in process
- Seyforth Ditch - design in process
- Houck Ditch - siphon, pipelines, diversion structure removal
- George Ditch - siphon, pipelines, diversion structure removal

## Bank Stabilization/Fish Habitat Improvement (Large Wood Placement)

Four projects were installed in 2001.

## Assessments/ Monitoring

- Water quality Monitoring of 3-5 sites 1996-2002
  - Temperature, dissolved oxygen, ph, conductivity + flow
- Groundwater Assessment, mapped all geology, drill test wells summer 2003.

## Josephine SWCD SB1010 Activity Summary, 2001-2003

Activity	Number
Landowners assisted	118
Acres	731

The **ODA regional representative** in southwest Oregon, Tim Stevenson, has participated in a number of educational and “regulatory” visits with local landowners. Working closely with local partners, OSU Extension, DEQ, Jackson SWCD, Rogue basin watershed councils, and local landowner groups, he has been able to respond to complaints, make courtesy visits, and teach classes to the Inland Rogue’s affected parties.

## Workshop presentations

- Regional State Agency meetings (OSP, WRD, ODFW, DEQ)
- Four “Horses and Mud” workshops
- OACD Small Acreage Workshops
- OSU Extension Irrigation series
- North Middle School Field School

#### Reports to watershed councils, commodity groups, and local governments

Jackson Stockmen's, Farm Bureau, Frontiers for Freedom, Jackson, Josephine, and Illinois Valley SWCDs, Josephine County Commissioners, Grants Pass and Eagle Point Irrigation Districts, Illinois Valley, Seven Basins, Middle Rogue, Little Butte Creek, and Upper Rogue Watershed Councils, State legislators Carl Wilson, Gordon Anderson, and Jason Atkinson.

ODA received seven formal, written complaints in the Inland Rogue planning area. ODA also responded to four informal complaints with visits and phone calls. In all of these cases, with the help of the SWCD and LAC members, the threat to water quality has been alleviated.

#### **IV. Inland Rogue Area Plan and Rules Review Process**

In December 2003, as required by OAR 603-090-0020, the LAC met to conduct the first periodic review and update of their Area Plan and Rules. Management Area landowners, representing agricultural commodities (cattle, hay, sheep, vine and row crops, and horses) served on the LAC. Other interests included timber owners and an irrigation and wastewater company. The LAC reviewed the progress and effectiveness of the Area Plan and Rules in preventing and controlling water pollution from agricultural activities in the Management Area. They also reviewed the compliance issues initiated in the past two years. The Basin Coordinator for DEQ, Bill Meyers, commented on the objectives of the Rogue TMDLs. Based on that evaluation, the LAC recommended updates and clarification to the Area Plan but determined that no changes to the Area Rules were necessary.

By the time of the next review in 2007, DEQ will have completed TMDLs for the Bear Creek, Middle Rogue, and the Illinois.

It should be noted that the LAC first reconvened in December of 2003. A second meeting was held to discuss and approve the plan changes in February of 2004. Because of some of the issues presented by a small group of LAC members for others to consider, the committee felt they could not continue the process until these issues had been resolved. A meeting in May 2003 was unable to produce a quorum or a solution to the sticking points. After two attempts to get votes over the phone or by mail, the group agreed to meet again during a "slow" time. The issues were discussed at length and resolved by eight out of ten committee members at a meeting in February of 2005.

#### **V. Conclusions**

The Inland Rogue LAC believes that the Area Plan and Rules have been implemented appropriately thereby improving water quality in the basin. The Jackson, Josephine, and Illinois Valley SWCD directors and staff remain committed to the intent and implementation of SB1010 in their region. They have added new directors who are former and current LAC members.



## **Attachment A. Review of Water Quality Data for the Inland Rogue Agricultural Water Quality Management Area**

This attachment summarizes the data ODA obtained from the Oregon Department of Environmental Quality's Laboratory Analytical Storage and Retrieval (LASAR) database to characterize baseline conditions. Data obtained from LASAR had to meet the following criteria to be considered useful.

1. Monitoring stations had to have at least partial influence from agricultural lands.
2. Data could not be older than 1985.
3. Data must be a continuous record of at least two years (though the frequency of monitoring was not considered).
4. Data set must include at least the following parameters:
  - a. Total suspended solids (TSS)
  - b. Nitrate
  - c. Ammonia
  - d. *E. coli* or fecal coliform
  - e. Total phosphorus or orthophosphate
  - f. Dissolved oxygen, or chemical oxygen demand/biological oxygen demand
  - g. PH

ODA considers these parameters important for tracking changes in water quality related to agricultural activities.

Besides using the LASAR database, ODA also contacted the Illinois Valley SWCD and the Applegate Watershed Council for additional information on monitoring activities in the basin. These agencies have been operating extensive water quality monitoring networks in their respective basins for the past five to six years.

The Illinois Valley SWCD has been collecting water quality data (dissolved oxygen, temperature, conductivity, and pH) at about 14 sites, including two that have the potential to be used in the future as trend monitoring locations. They have not been collecting data on nitrogen or phosphorus compounds, sediment, or bacteria. The Applegate Watershed Council has been collecting data at 22 locations since 1996. These data include nitrate-nitrite and total phosphorus, in addition to the parameters listed above for the Illinois Valley SWCD, but no bacteria or sediment.

Four monitoring sites on the Rogue River and one on Little Butte Creek listed on the LASAR database met the baseline criteria. The Rogue River sites are located at the Robertson Bridge, the Lobster Creek Bridge at Highway 234, and near Dodge Peak on Highway 234. The Little Butte site is at Agate Road. Along with the sites described above, these provide enough data to assess baseline conditions within the Inland Rogue, with the exceptions of specific water quality variables previously mentioned. The Rogue and Little Butte monitoring sites have extensive data records, and are still active. They can readily serve as trend monitoring locations for the east side of the Rogue Basin. A monitoring site operated by the Applegate Watershed Council on the Applegate River near the confluence with Murphy Creek would be good for trend monitoring of agricultural land, with the addition of TSS and *E. coli*. The Illinois Valley SWCD's site on the Illinois River at the south end of Cave Junction would be good for trend monitoring, with the addition of TSS, nitrates, total phosphorus, and *E. coli*.

A review of water quality data from these sites found no trends on Little Butte Creek. The Rogue River at Robertson Bridge showed a slight decreasing trend in phosphorus, but it was not statistically significant. No other trends were apparent on the Rogue. The water quality variables of concern did not show apparent problems.